

MINIMAL CONSULTATION PROVIDED TO PATIENTS PRESENTING SYMPTOMS IN THE ROMANIAN COMMUNITY PHARMACY

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Abstract

A community pharmacist may release over-the-counter (OTC) medication based either on a direct request coming from the patient, or as a first line therapy that succeeds a minimal consultation, when a patient showing symptoms requests advice from the pharmacist.

In the study, researchers used the covert "mystery customer" method to quantitatively measure the pharmacist's involvement in minimal consultation and counseling of patients showing symptoms.

All the ninety nine pharmacists visited by "mystery customers" made therapeutic recommendations. The average of pharmacists' grades (on a scale from 0 to 5) was as low as 2.06 ($\pm$ 0.84). Although 57.6% pharmacists counseled the patients about drugs' use, much fewer asked additional – but relevant – questions, like "since when did the symptoms start?" – 6.1% or "what is the currently taken medication?" – 12.1%. In-depth details about symptoms were requested in only 30.3% of the visits. The differences in minimal consultation and counseling performances are statistically significant ($p < 0.05$, Kruskal-Wallis) and were further tested by Mann-Whitney U pair tests (applied to each pair of evaluation criteria). The main conclusion of this research was that Romanian community pharmacists should approach more profoundly the minimal consultation in pharmacy and need additional training in order to.

Rezumat

Farmacistul din farmacia comunitară poate elibera medicamentele care nu necesită prescripție medicală (OTC, „over-the-counter”) fie în baza unei solicitări directe venite de la pacient, fie sub forma unei recomandări de primă intenție ce succede unei consultații minimale, dacă pacientul se prezintă în farmacie acuzând simptome de boală.

Aprecierea cantitativă a implicării farmacistului în efectuarea consultației minimale s-a realizat cu ajutorul „clienților misterioși”, pregătiți să interpreteze rolul unor pacienți care acuză simptome și să solicite recomandări farmaciștilor evaluați.

Rezultatele, colectate de la 99 de farmaciști, au arătat că toți farmaciștii au făcut recomandări pacienților, media notelor obținute (pe o scală de la 0 la 5) la consultul minimal și consilierea recomandărilor fiind doar de 2,06 ($\pm$ 0,84). Cincizeci și șapte dintre farmaciștii evaluați au consiliat pacienții la eliberarea medicamentelor recomandate, însă foarte puțini au adresat întrebări suplimentare precum „De cât timp au debutat simptomele?” (6,1%) sau „Ce medicație ați administrat până acum?” (12,1%), esențiale la

un consult minimal. Detalii despre simptome au solicitat numai 30,3% dintre farmaciști. Diferențele în consultație și consiliere constatate, semnificative statistic ($p < 0,05$, Kruskal-Wallis) au fost testate în detaliu prin teste U (Mann-Whitney), pe perechi de criterii de evaluare. Concluzia principală a studiului este că o consultație minimală în farmacia comunitară din România este insuficient aprofundată de farmaciști și necesită pregătire suplimentară din partea acestora.

Keywords: "mystery customer", minimal consultation, counseling, community pharmacy.

Introduction

The last decades, pharmaceutical care services had an increasing influence in changing the pharmacy profession's role, due to their benefits in improving patient's health - related quality of life. New responsibilities, such as an active involvement in reaching better therapeutic outcomes [1, 5, 13] and improving the quality of patients' lives [6] are now priorities. Pharmaceutical care is a practical, continuous and systematic process through which the health professionals build up the relationship with their patient [5].

In front of a patient, pharmacists place themselves in one of the following situations: either decisional (when dispensing over-the-counter (OTC) medication) or mediating the patient – physician relationship (when dispensing prescription medication) [9]. A stronger therapeutic relationship between the pharmacist and the patient (obtained through higher effort and implication) may enhance patients' compliance to medication and a better quality of life [13].

When a patient enters a community pharmacy showing some symptoms, it is expected that the pharmacist will provide a minimal consultation, preferable in a quiet space or area (consultation area). Based on their medical knowledge and patient provided information, the pharmacist issues a diagnosis hypothesis. Consequently, the pharmacist shall decide either to refer the patient to a physician or to recommend a first-line OTC treatment. When choosing an OTC medication to dispense, the pharmacist needs to warn the patient that, if her / his medical condition persists or worsens during the next hours or days, the patient should address a doctor or ask for emergency medical service, when the case [3].

Minimal consultation in community pharmacies has to meet simultaneously several conditions: (I) both the patient and the pharmacist must be directly involved; (II) the professional discussion shall envisage the recommended treatment and the aspects considering its administration; (III)

the pharmacy must have a private space like a counseling room [4,10] or a consultation area [3] where the discussion shall take place. It is inappropriate to make a conversation that involves private aspects at the counter, especially when other patients may hear it [1,2,4,10].

Objective

The main objective of this research was to quantitatively measure the pharmacist's involvement in minimal consultation and counseling of patients showing symptoms in the Romanian community pharmacy. A covert "mystery customer" methodology was used to achieve the main objective.

Location

Seventy chain pharmacies in Bucharest and main cities of Romania participated in this study, during April 2007 and December 2008.

Materials and methods

Widely used in marketing studies, the "mystery customer" methodology was applied in this study for data collection and allowed the sponsor (the initiator of the study, in our case a pharmaceutical chain) to evaluate and enhance the services offered to patients [12]. The employees (the pharmacists) were observed in their work environment by mystery customers that played one of the pre-established scenarios.

People recruited to act as mystery customers were unknown to pharmacies' staff and were trained to get familiarized with the study requirements and work materials. They were health professionals (pharmacists and physicians) that acted as a typical patient. Their role consisted in visiting the chain pharmacies and pursuing the pre-set scenarios. Neither the visits' schedule nor the "mystery customers'" identity were pre-announced to pharmacies staff, and remained unknown till the end of the study.

Scenario – the "mystery customer" visit

"Mystery customers" acted the role of a patient describing a minimal set of symptoms, during their visits in pharmacy. As mentioned above, "mystery customers" learned how to present their symptoms during the short training session they followed before the study started. They also learned about: (a) the questions that pharmacists might ask them and the possible answers, (b) the aspects that need to be evaluated, and (c) how to use the especially designed, multiple-criteria Scoring Protocol - the document used for collecting pharmacists' evaluations (detailed in Fig. 1).

The authors of this study developed a minimal consultation model that all patients presenting symptoms should benefit from a pharmacist,

regardless the illness they have. Based on that model, the authors finalized a set of five criteria that defines the minimal consultation and that should be followed by pharmacists when interviewing those patients. Thus, the “mystery customer” noticed and noted if the pharmacist (a) asked “Since when did the symptoms start?” (C1), (b) requested a detailed description of the presented symptoms (C2), and was interested to find out if the patient already took any medication (“What medication have you administered until now?”, C3). After the minimal consultation, it was expected that the pharmacist will recommend the first-line treatment with OTC products (C4) and will counsel the patient accordingly for proper administration (C5).

Pharmacy		Date:		Hour:	
Name					

Minimal consultation and pharmacotherapeutic recommendation

a. Pharmacist asked "Since when the symptoms started?"	☐
b. Pharmacist requested details on symptoms	☐
c. Pharmacist asked "What medication have you administered?"	☐
d. Pharmacist recommended the first-line treatment	☐
e. Pharmacist counseled the patient for proper medication use	☐

Figure 1.

The Scoring Protocol for minimal consultation evaluation

Data collection

All the visits of the “mystery customers” were randomly assigned and scheduled by the research team. During each pharmacy visit, they remembered the extent of minimal consultation and counselling the pharmacist provided. After leaving the pharmacy, the “mystery customer” marked on the scoring protocol for each criterion met (each criterion met equals 1 point granted). The pharmacist’s total scores varied from 0 to 5.

One of the responsibilities of the research team was to keep the results accurate and to limit the bias. Reaching this goal is strongly dependent on the “mystery customer’s” memory, due to the fact that the scoring protocol had to be checked later, after leaving the pharmacy. Thus, the research team considered the option to design a scoring protocol with check-boxes, that limits the bias caused by lack of memory and make easier to remember the extent of pharmacist’s intervention.

Data collected were introduced in a computerized database and analysed. Private information were neither introduced in the database nor used in calculations and not disclosed to any person or entity outside the research team.

Data analysis

The statistical population consisted of all pharmacists that were visited and evaluated. All five evaluation criteria were equally scored (0.20). Data was qualitative, categorical.

Firstly, a set of descriptive calculations was performed (scores' distribution, frequency calculations and histograms). Then, nonparametric statistical methods were applied to test the significance of differences between evaluation criteria, if it existed. Kruskal-Wallis test was used for global calculations. The statistical significance was tested against the p value of 0.05 (significance level: 5%). When a global difference was found to be statistically significant, U tests (Mann-Whitney) were applied for pairs of criteria. Data analysis was performed using SPSS 16.

Results and discussion

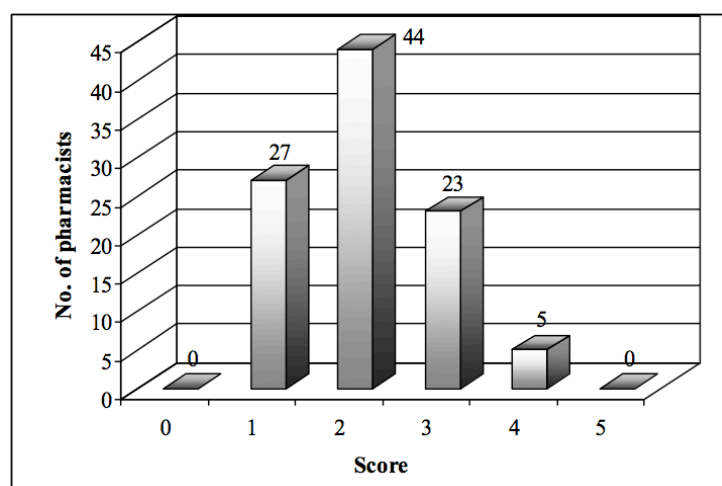
The "mystery customers" visited and evaluated ninety-nine pharmacists that recommended OTC products based upon the performed minimal consultation (questions addressed to the patient to obtain a more detailed clinical view) [8]. Scores' distribution is presented in Table I and Figure 2. The average score was 2.06 (± 0.84).

Table I.

Distribution of pharmacists' scores obtained for minimal consultation and patient counseling

Score	N ^a	Frequency (%)
0	0	0.0
1	27	27.3
2	44	44.4
3	23	23.2
4	5	5.1
5	0	0.0
Total	99	100.0
<i>N^a - Number of pharmacists that summarized that score</i>		

A special situation is represented by extreme scores: none of the pharmacists received either 0 points or 5 points.

**Figure 2.**

Distribution of pharmacists' scores obtained for minimal consultation and patient counseling

Seventy one pharmacists (71.7%) received only 1 or 2 points (grade 1 for 27 pharmacists, and grade 2 for 44 pharmacists), whilst twenty three (23.2%) got 3 points and only five (5.1%) reached 4 points.

Table II, as well as histograms from Figure 3, describe the pharmacists' scores detailed on evaluation criteria.

Pharmacists recommended a first-line therapy to all "mystery customers" showing symptoms that visited the chain pharmacies (C4, 100%). Fifty seven pharmacists (57.6%) provided patient counseling for proper medication use (C5), but very few asked important questions as "Since when did the symptoms start?" (C1, 6.1%) or "What medication have you administered until now?" (C3, 12.1%). Thirty pharmacists (30.3%) were interested to find more details on symptoms presented (C2), by asking additional questions.

Table II.

Frequency calculation of evaluation criteria for pharmacists providing minimal consultation to patients with symptoms (N = 99)

	C1	C2	C3	C4	C5
YES	6.1%	30.3%	12.1%	100.0%	57.6%
NO	93.9%	69.7%	87.9%	0.0%	42.2%
YES – pharmacist asked or counseled the patient, as per criterion C1...C5 NO – pharmacist did not ask or counsel the patient, as per criterion C1...C5 C1 – Since when did the symptoms start? C2 – Did the pharmacist request a detailed description of symptoms? C3 – What medication have you administered until now? C4 – Did the pharmacist recommend the first-line treatment? C5 – Did the pharmacist counsel the patient for proper medication use?					

Within the five evaluation criteria for minimal consultation and patient counselling, statistically significant differences were present ($p=0.001$, Kruskal-Wallis). The following pairs of criteria exhibited significance (Mann-Whitney “U” test, $p < 0.05$): C1 – C2, C1 – C4, C1 – C5, C2 – C3, C2 – C4, C2 – C5, C3 – C4, C3 – C4 and C4 – C5. The sources for these differences were found to be criteria C1 and C3.

It is obvious the high degree of results’ heterogeneity (see Figure 3). With the exception of criteria C1 and C3 (YES percentages very low, 6.1% and 12.1% respectively), the other three criteria are spread along the 0 – 100% interval (YES percentage around 30% - C2, 60% - C5 and 100% - C4).

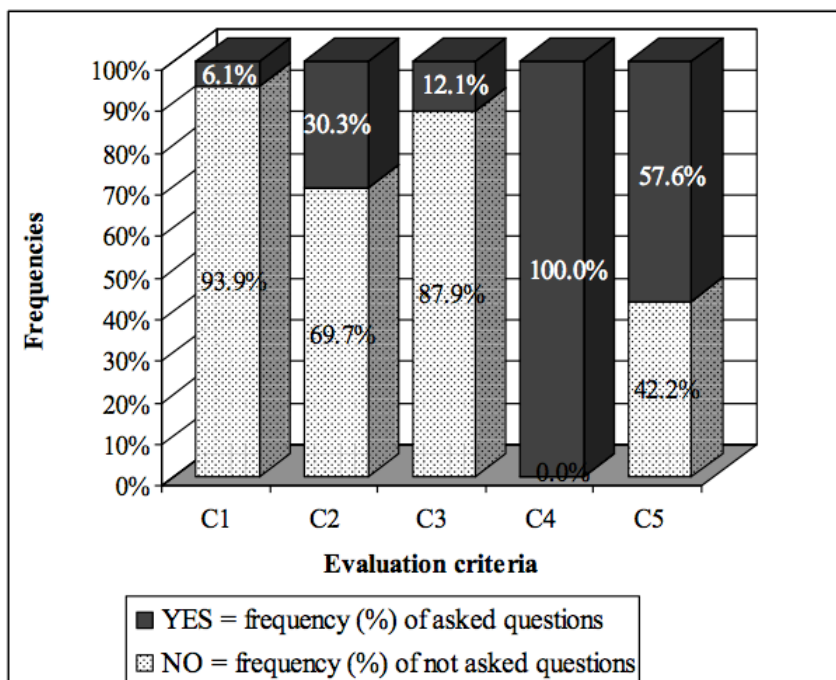


Figure 3.

Frequency calculation of evaluation criteria for pharmacists providing minimal consultation to patients with symptoms

Only few pharmacists considered important to obtain information that might be of greatest importance in issuing the most probable diagnosis hypothesis, such as the time that passed since symptoms started (C1) and if the patient started to auto-medicate prior to visiting the pharmacy (C3) – between these two criteria there is no statistical significant difference, so the statement is valid for both of them.

It is also important to mention that all pharmacists made recommendations to patients showing symptoms and didn't allow any patient to leave the pharmacy with no medication (C4, 100.00%).

Conclusions

A patient presenting symptoms in a community pharmacy and requesting for an appropriate OTC therapy is a common situation that needs pharmacist's attention. The pharmacist providing the minimal consultation is the first health professional the patient meets, on whom depend the patient's correct evaluation and treatment [5]. During such visit, the community pharmacist may approach the patient in different ways, such as by discussing in detail about her/his symptoms, by giving advices on how to control the symptoms, through appropriate OTC medication, or by referring her/him to a physician [7].

The present work revealed some important findings on the extent to which pharmacists are providing minimal consultation and counseling for patients presenting symptoms. On a scale from 0 to 5, the average score that pharmacists obtained was 2.06.

The results of our research study are less satisfactory than in similar studies from other countries. Thus, only 6 to 30% of the Romanian chain pharmacists gave importance to questioning the patient and to obtain relevant information, before recommending the first-line OTC medication. By comparison, a study published in 1998 in USA mentioned about 25 to 52.4% pharmacists providing minimal consultation [5]. Another research, from UK, published in 2004, involved "mystery patients" to measure the frequency of the most addressed questions to patients presenting symptoms in two-case scenarios. Between 14 and 79% of the assessed pharmacists provided minimal consultation in the first case scenario (patient with headache). The second scenario (patient presenting an abdominal pain) accounted for 21 to 86% pharmacists that asked relevant questions before making a therapeutic recommendation [11].

The important ratio of lower scores (1 and 2) that most of our evaluated pharmacists received, raise the problem of insufficient implication and superficial questioning of this special category of patients. As there are no standardized protocols to handle these patients and in order to correctly approach any similar cases, community pharmacists are encouraged to follow continuous education trainings and practical stages in pharmacy.

The present research lasted for 21 months and focused on the evaluation of pharmacists visited by patients presenting symptoms in chain community pharmacies. The minimal consultation was recorded in 99

scoring protocols, corresponding to 99 evaluations. The average pharmacists' score was low (2.06 on a scale from 0 to 5).

A minimal consultation provided in a community pharmacy is a challenge that only a few pharmacists were able to perform properly. Receiving mostly 1 and 2 points (71.7% pharmacists, n = 99), these pharmacists did not ask for detailed and important information from patients about their symptoms (intensity, duration – criteria C2 only 30.3% and C1 only 6.1%), as well as about previously taken medication (patient auto-medication, C3 only 12.1%). It is acknowledged that these details make the difference between the right and the wrong therapeutic approach.

Due to the missing of a standardized protocol, pharmacists need to involve more and to show more responsibility when approaching the patients with symptoms asking for medication, so that their first-line recommended OTC therapy can help the patients with a minimized risk. It is also advisable that pharmacists shall additionally train their medical and clinical abilities that will allow them to correctly evaluate patients' symptoms.

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